BookletChart™

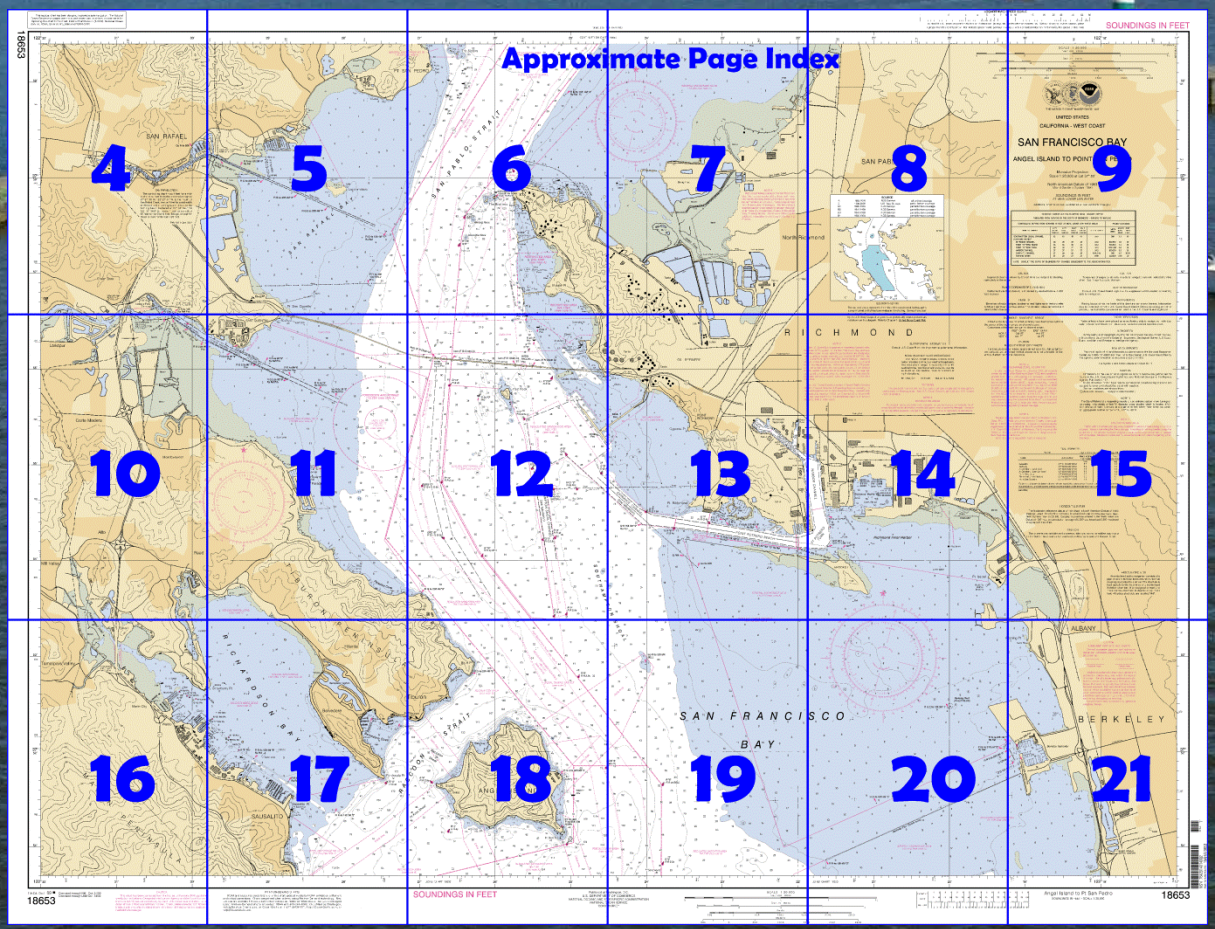
San Francisco Bay – Angel Island to Point San Pedro

NOAA Chart 18653

A reduced-scale NOAA nautical chart for small boaters

When possible, use the full-size NOAA chart for navigation.

- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker



Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=18653.

(Selected Excerpts from Coast Pilot)
Berkeley, the site of the University of California, adjoins Oakland and **Emeryville** to the N. The long pier extending into the bay is marked by a light; the 1.7-mile offshore section of the pier is in ruins, and the inshore 3,000-foot section is used for fishing.
Berkeley Yacht Harbor, on the N side of the long pier, is protected at the entrance by two detached breakwaters. The S breakwater is marked by lights on the ends and at the center. The N breakwater is marked by a light on the NE and SW ends.

Southampton Shoal Light (37°52'55"N., 122°24'01"W.), 32 feet above the water, is shown from a white cylindrical tower near the S end of the 1.6-mile-long shoal. A sound signal (bell) is at the light.
Richmond Harbor, on the E shore of San Francisco Bay 1.5 miles N of Southampton Shoal Light, includes the port facilities to Point San Pablo.
Invincible Rock, 1.3 miles N of Richmond-San Rafael Bridge, is covered 7 feet. **Whiting Rock,** covered 13 feet, is 0.2 mile NNE of Invincible Rock. Both rocks are buoyed. The buoy marking Whiting Rock is reported to submerge during strong ebb currents caused by the heavy spring runoffs in the area. Large vessels changing course and other craft in this area are advised to use caution.
The Brothers, 1.7 miles N of Richmond-San Rafael Bridge, are two small low flat-topped islands. **East Brother Island Light** (37°57'48"N., 122°26'01"W.), 61 feet above the water, is shown from a buff square tower on the E island; a seasonal sound signal is at the station.
Point San Pablo, 0.3 mile NE of East Brother Island Light, is the NW extremity of a low ridge of hills on the E shore of San Francisco Bay at its junction with San Pablo Bay. The point rises abruptly to a height of 140 feet. A dredged channel off the NE shore of the point is used by commercial and sport fishermen.
Richardson Bay, 2 miles N of the Golden Gate Bridge, is shoal except for the S part fronting Sausalito. In the N part of Richardson Bay, a wildlife sanctuary, established by the National Audubon Society, provides safe refuge for migratory fowl that arrives each fall. The sanctuary is closed to marine traffic from October to March. Seasonal buoys N of a line approximately **097°** True from Strawberry Point to Belvedere, mark the perimeter of the sanctuary.
A **no-wake speed limit** is in all channels in Richardson Bay.
Sausalito harbors some commercial fishing boats and many pleasure craft. Several boatbuilding and repair yards have marine ways.
Point Blunt, the SE extremity of Angel Island, terminates in a 60–foot-high knob, and is connected with the island by a low neck of land. **Point Blunt Light** (37°51'12"N., 122°25'09"W.), 60 feet above the water, is shown from a white house on the point; a sound signal is at the station. A shoal with visible and covered rocks extends SSE for 0.1 mile. Tide rips and swirls are heavy around the point, especially with a large falling tide. A lighted buoy is off **Point Stuart**, the W extremity of Angel Island. A shoal area covered 14 to 30 feet, extending SW from **Point Knox**, is marked by a lighted buoy.
Raccoon Strait, nearly 0.5 mile wide between Angel Island and the mainland, is used by ferry boats and pleasure craft. The tidal currents in the strait have considerable velocity, and rips and swirls are heavy at times. A midchannel course can be followed. **Raccoon Shoal**, covered 29 feet, is 500 yards N of Raccoon Strait Lighted Buoy 4. A strong ebb current sets directly across the channel at the E entrance.
Point San Quentin, at the W end of the Richmond-San Rafael Bridge, has low land on either side. The buildings of the State Prison S of the bridge and the long wharf N of it are prominent. A State **security zone** extends off the SE side of Point San Quentin. The buoys are orange and white and display the words "San Quentin Prison."
San Rafael Creek, 1.8 miles NW of Point San Quentin, is used by many small craft basing at the city of **San Rafael**. A dredged channel leads across the flats of **San Rafael Bay** into San Rafael Creek to the Grand Avenue bridge, about 1.2 miles above the mouth; a turning basin is on the S side of the channel just below the bridge.

U.S. Coast Guard Rescue Coordination Center
24 hour Regional Contact for Emergencies

RCC Alameda	Commander 11th CG District Alameda, CA	(510) 437-3700

Table of Selected Chart Notes

SAN RAFAEL CREEK

The controlling depth was 4 feet for a mid-width of 50 feet from the channel entrance 37° 57' 30" N, 122° 27' 34" W, to the mouth of San Rafael Creek; thence 2 feet for a mid-width of 30 feet to the turning basin, 2 feet in the turning basin centered at 37° 58' 09.4" N 122° 31' 04.9" W, thence 1 foot for a width of 60 feet to the Grand Ave. Bridge, except for shoal to bare for the last 125 feet.

Feb 2011- Jan 2012

Mercator Projection
Scale 1:20,000 at Lat 37° 55'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

ARTICULATED AIDS

An articulated aid to navigation consists of a pipe structure that oscillates around a universal coupling connected to a sinker. The structure is kept upright by the buoyancy of a submerged flotation chamber. It is designed primarily to mark narrow channels in depths of up to 60 feet. All articulated aids are labelled "*Art*".

NOTE F

High speed ferries operate in the San Francisco Bay. Mariners are cautioned that these craft move very rapidly and may transit waterways at angles to the normal direction of traffic. Ferries may deviate from these routes if necessary. Mariners should exercise caution when transiting between the origin or terminus of a charted ferry route and the actual ferry docking facility. Go to www.sfmx.org for additional information on the Ferry Traffic Routing Protocol.

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Mt. Pise, CA	KHB-49	162.400 MHz WX2

CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Pipeline Area *Cable Area*

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

NOTE Z

NO-DISCHARGE ZONE, 40 CFR 140

Under the Clean Water Act, Section 312, all vessels operating within a No-Discharge Zone (NDZ) are completely prohibited from discharging any sewage, treated or untreated, into the waters. All vessels with an installed marine sanitation device (MSD) that are navigating, moored, anchored, or docked within a NDZ must have the MSD disabled to prevent the overboard discharge of sewage (treated or untreated) or install a holding tank. Regulations for the NDZ are contained in the U.S. Coast Pilot. Additional information concerning the regulations and requirements may be obtained from the Environmental Protection Agency (EPA) web site: http://www.epa.gov/owow/oceans/regulatory/vessel_sewage/.

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 7. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 11th Coast Guard District in Alameda, California or at the Office of the District Engineer, Corps of Engineers in San Francisco, California.

Refer to charted regulation section numbers.

NOTE C

The U.S. Coast Guard operates a mandatory Vessel Traffic Services (VTS) system in the San Francisco Bay and surrounding areas. Vessel operating procedures and designated radiotelephone frequencies are published in 33 CFR 161, the U.S. Coast Pilot, and/or the VTS User's Manual. Mariners should consult these sources for applicable rules and reporting requirements. Although mandatory VTS participation is limited to the navigable waters of the United States, certain vessels are encouraged or may be required, as a condition of port entry, to report beyond this area to facilitate advance vessel traffic management within the VTS area.

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SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

RICHMOND - SAN RAFAEL BRIDGE

3 fixed white lights are mounted vertically over fixed green lights at the center of the main navigation channel spans.

Clearances of the main navigation channel spans.

	WEST CHAN	EAST CHAN
HOR CL	1000 FT	970 FT
VERT CL	185 FT	135 FT

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

CAUTION

BASCULE BRIDGE CLEARANCES

For bascule bridges, whose spans do not open to a full upright or vertical position, unlimited vertical clearance is not available for the entire charted horizontal clearance.

HEIGHTS

Elevations of rocks, bridges, landmarks, and lights are in feet and refer to Mean High Water. Contour and summit elevation values are in feet and refer to Mean Sea Level.

CAUTION

The currents are variable and uncertain, tide rips, swirls, or eddies may occur in the Golden Gate and as far eastward as Alcatraz Island and Racoon Strait.

NOTE B

RECREATION AREAS

Recreation areas are intended primarily for use by recreation vessels. Such areas should not be utilized by vessels 300 gross tons or more for through passage or for any other purpose, except in case of emergency or special circumstances.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:

⊙(Accurate location) o(Approximate location)

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

RACING BUOYS

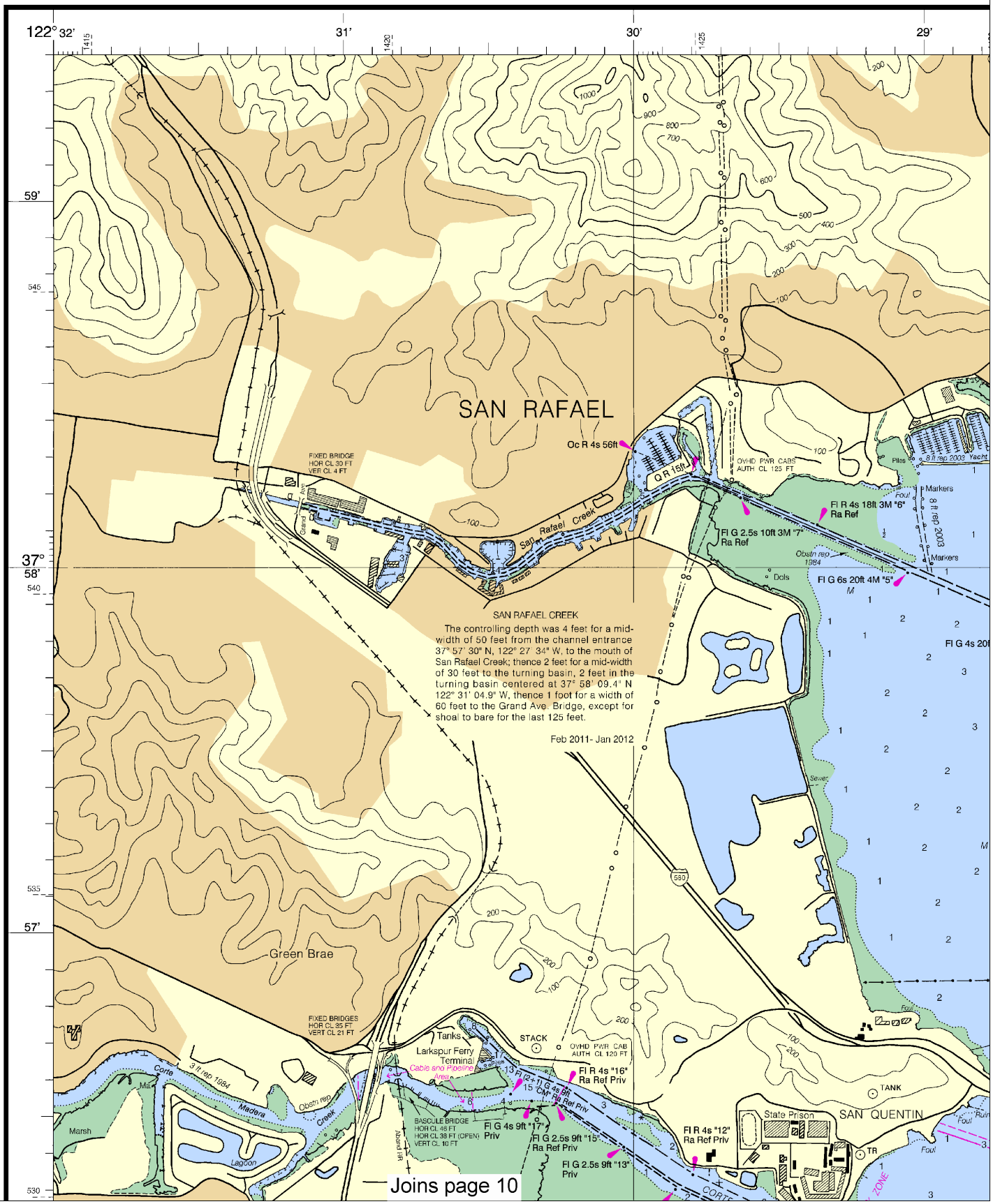
Racing buoys within the limits of this chart are not shown hereon. Information may be obtained from the U.S. Coast Guard District Offices as racing and other privately maintained buoys are not all listed in the U.S. Coast Guard Light List.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard, and National Geospatial-Intelligence Agency.

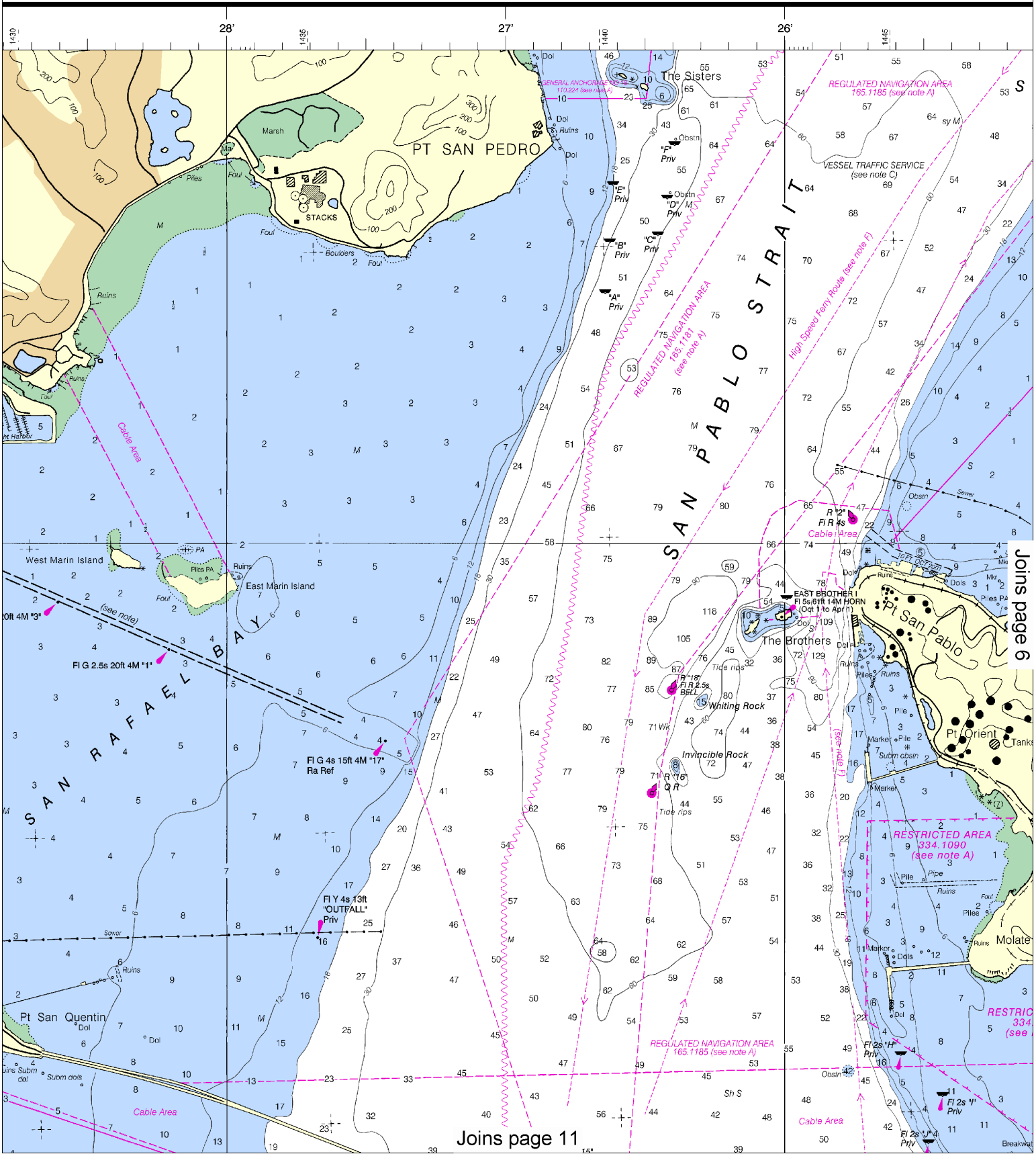


Note: Chart grid lines are aligned with true north.

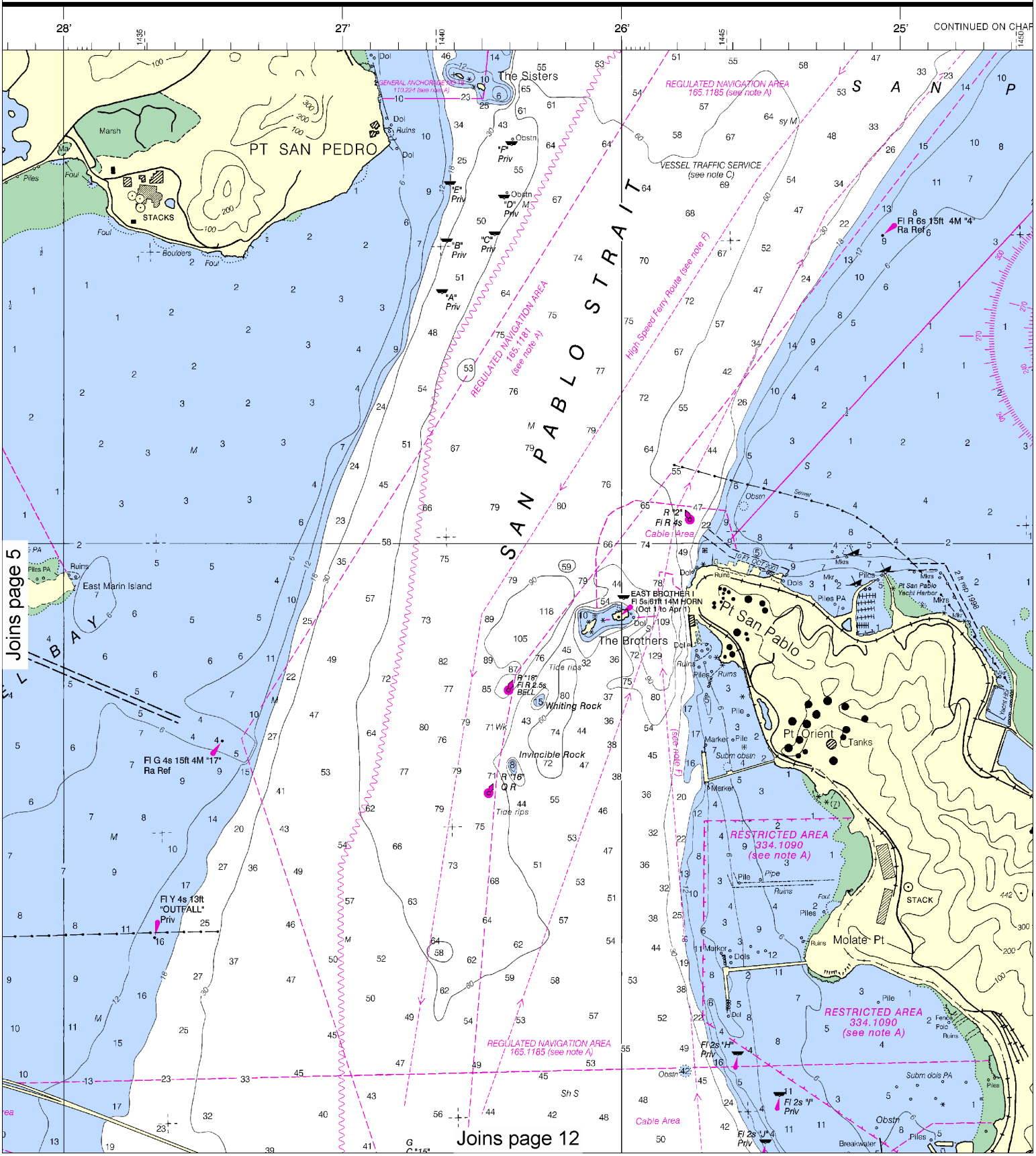
Printed at reduced scale. ~~SCALE 1:20,000~~ See Note on page 5.

Nautical Miles: 0, 1, 1 ½

Yards: 500, 0, 500, 1000, 1500, 2000, 2500



This BookletChart was reduced to 75% of the original chart scale.
The new scale is 1:26667. Barscales have also been reduced and
are accurate when used to measure distances in this BookletChart.



Note: Chart grid lines are aligned with true north.

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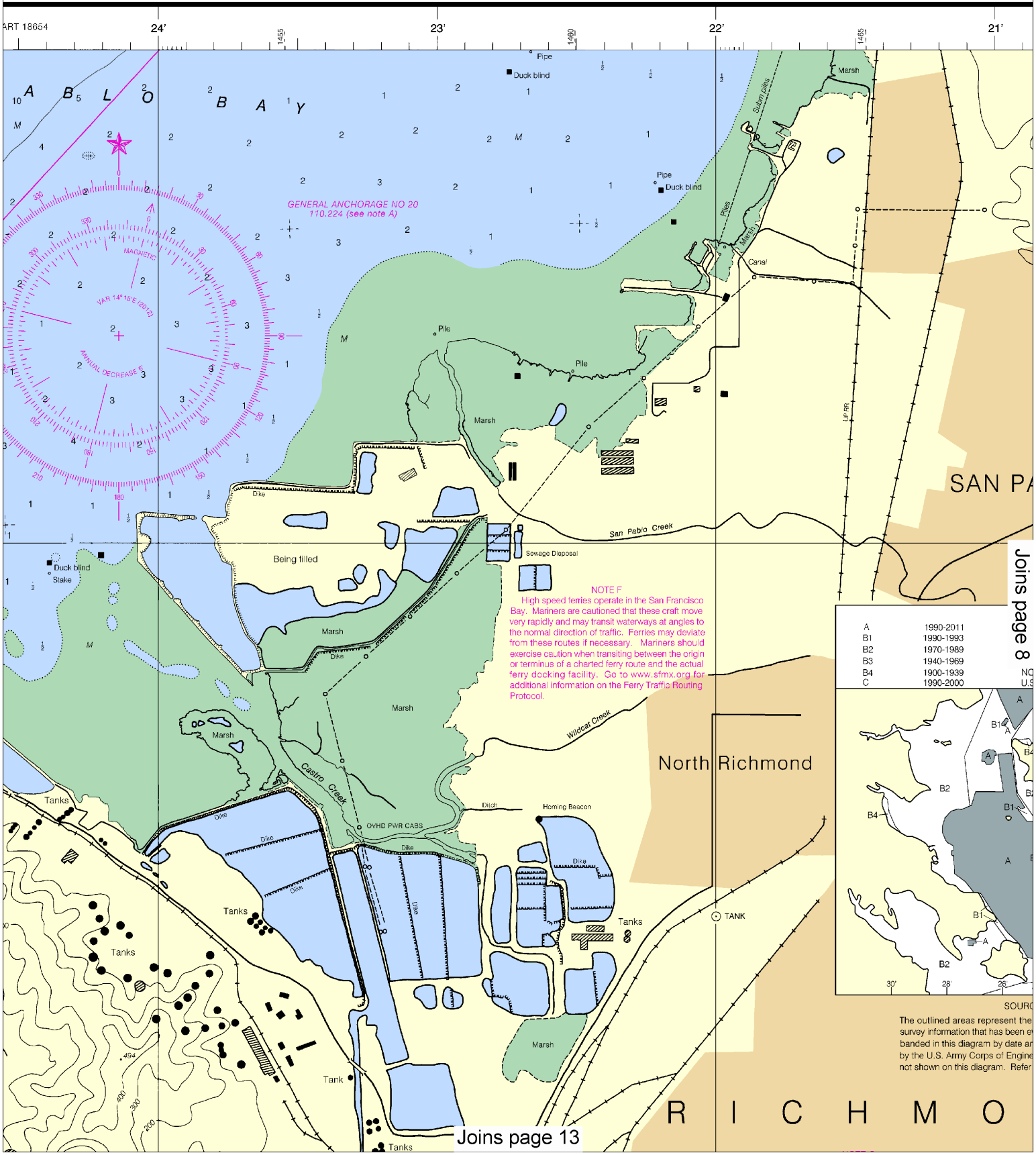
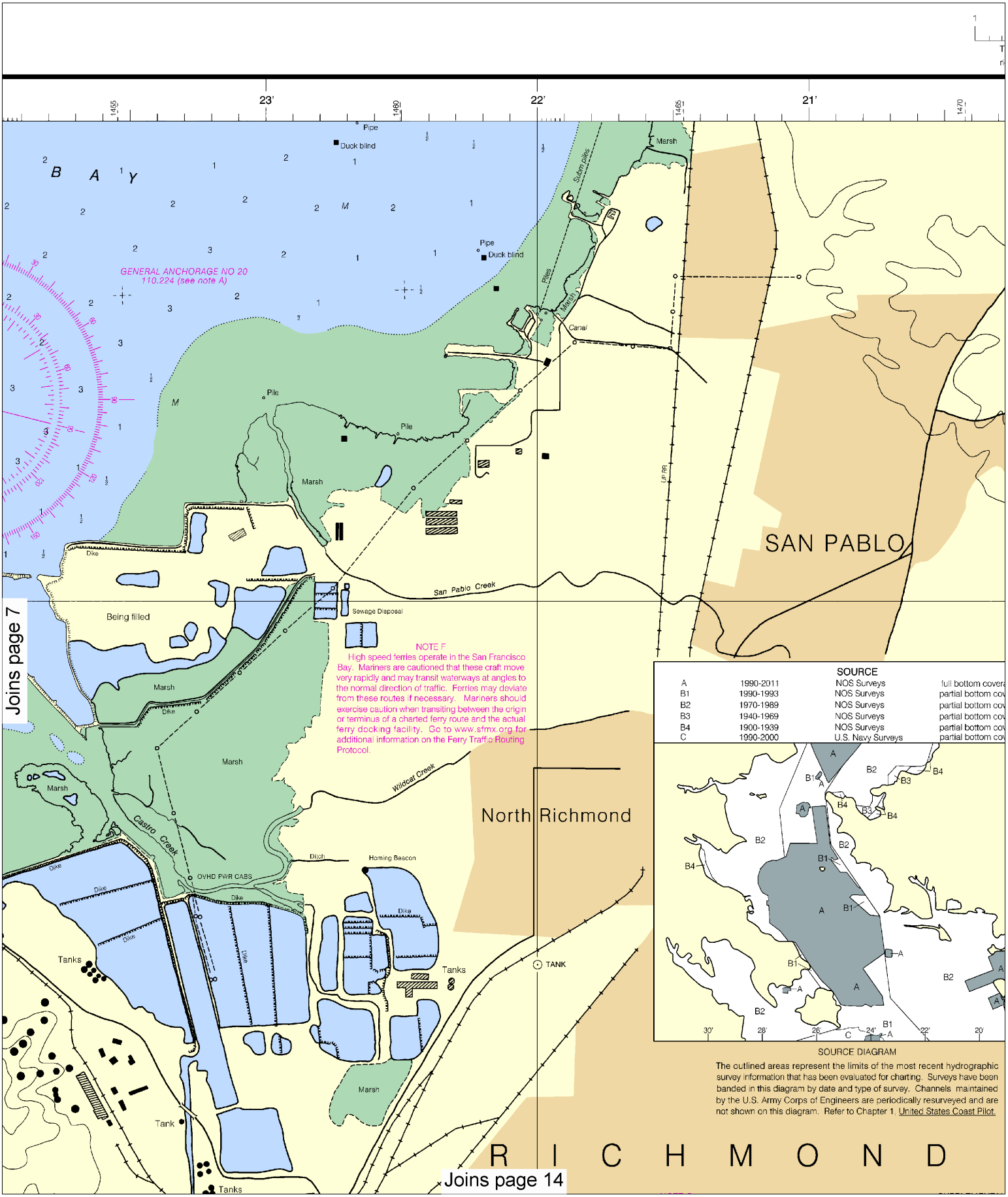
Nautical Miles: 0 — 1 — 1 ½

Yards: 500 — 0 — 500 — 1000 — 1500 — 2000 — 2500


ART 18654
24'
23'
22'
21'
1455
1460
1465
A B L O
B A Y
GENERAL ANCHORAGE NO 20
110.224 (see note A)
MAGNETIC
VAR 14°15'E (2012)
ANNUAL DECREASE
Pipe
Duck blind
Pile
Marsh
Slurry piles
Piles
Canal
UP RR
Dike
Being filled
Sewage Disposal
San Pablo Creek
Duck blind
Stake
NOTE F
High speed ferries operate in the San Francisco Bay. Mariners are cautioned that these craft move very rapidly and may transit waterways at angles to the normal direction of traffic. Ferries may deviate from these routes if necessary. Mariners should exercise caution when transiting between the origin or terminus of a charted ferry route and the actual ferry docking facility. Go to www.sfmx.org for additional information on the Ferry Traffic Routing Protocol.
Wildcat Creek
Castro Creek
North Richmond
Tanks
OVHD PWR CABS
Ditch
Homing Beacon
TANK
Tank
494
400
300
200
Joins page 13
Joins page 8
A 1990-2011
B1 1990-1993
B2 1970-1989
B3 1940-1969
B4 1900-1939
C 1990-2000
30'
28'
26'
The outlined areas represent the
survey information that has been e
banded in this diagram by date ar
by the U.S. Army Corps of Engine
not shown on this diagram. Refer
SAN PA
R I C H M O



Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:20,000~~ See Note on page 5.

Nautical Miles
0 1 1½

Yards
500 0 500 1000 1500 2000 2500

LOGARITHMIC SPEED SCALE

2 3 4 5 6 7 8 9 10 15 20 25 30 40 50 60

To find SPEED, place one point of dividers on distance run (in any unit) and the other on minutes run. Without changing divider spread, place right point on 60 and left point will then indicate speed in units per hour. Example: with 4.0 nautical miles run in 15 minutes, the spread is 16.0 knots

SOUNDINGS IN FEET

20' 19' 122° 18' 17'

SCALE 1:20,000

Nautical Miles

Statute Miles

Yards

Meters

THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES

CALIFORNIA - WEST COAST

SAN FRANCISCO BAY

ANGEL ISLAND TO POINT SAN PEDRO

Mercator Projection
Scale 1:20,000 at Lat 37° 55'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

Additional information can be obtained at nauticalcharts.ncaa.gov.

RICHMOND HARBOR AND SOUTHAMPTON SHOAL CHANNEL DEPTHS
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO MAR 2012

	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
SOUTHAMPTON SHOAL CHANNEL	42	45	45	44	3-12	600	1.1	45
RICHMOND HARBOR								
ENTRANCE CHANNEL	36	36	36	36	3-12	600-550	1.0	38
POINT POTRERO REACH	35	35	36	34	3-12	500-600	1.4	38
POINT POTRERO TURN	36	38	37	37	3-12	600-1250	0.6	38
HARBOR CHANNEL	37	37	37	37	3-12	850-200	0.5	38
SANTA FE CHANNEL	27	29	29	26	9-09; 3-12	200	0.5	38-30
TURNING BASIN	27	28	27	21	9-09	200-500	0.16	30

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

PLANE COORDINATE GRID (NAD 1927)

California State Grid, Zone 3, is indicated by dashed ticks at 5,000 foot intervals.

HEIGHTS

Elevations of rocks, bridges, landmarks, and lights are in feet and refer to Mean High Water. Contour and summit elevation values are in feet and refer to Mean Sea Level.

RICHMOND - SAN RAFAEL BRIDGE

3 fixed white lights are mounted vertically over fixed green lights at the center of the main navigation channel spans.
Clearances of the main navigation channel spans.

	WEST CHAN	EAST CHAN
HOR CL	1000 FT	970 FT
VERT CL	185 FT	135 FT

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

RACING BUOYS

Racing buoys within the limits of this chart are not shown hereon. Information may be obtained from the U.S. Coast Guard District Offices as racing and other privately maintained buoys are not all listed in the U.S. Coast Guard Light List.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

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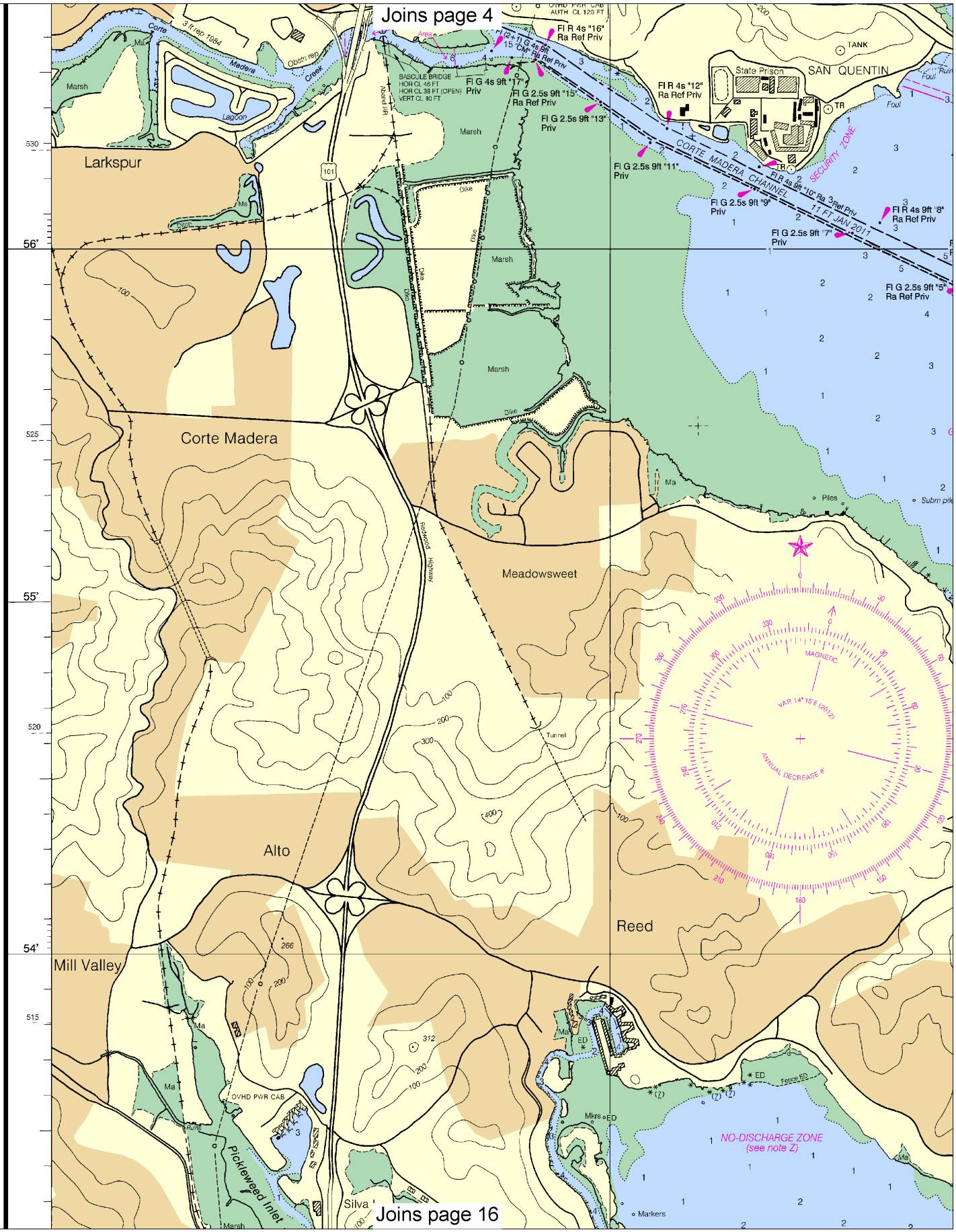
Joins page 15



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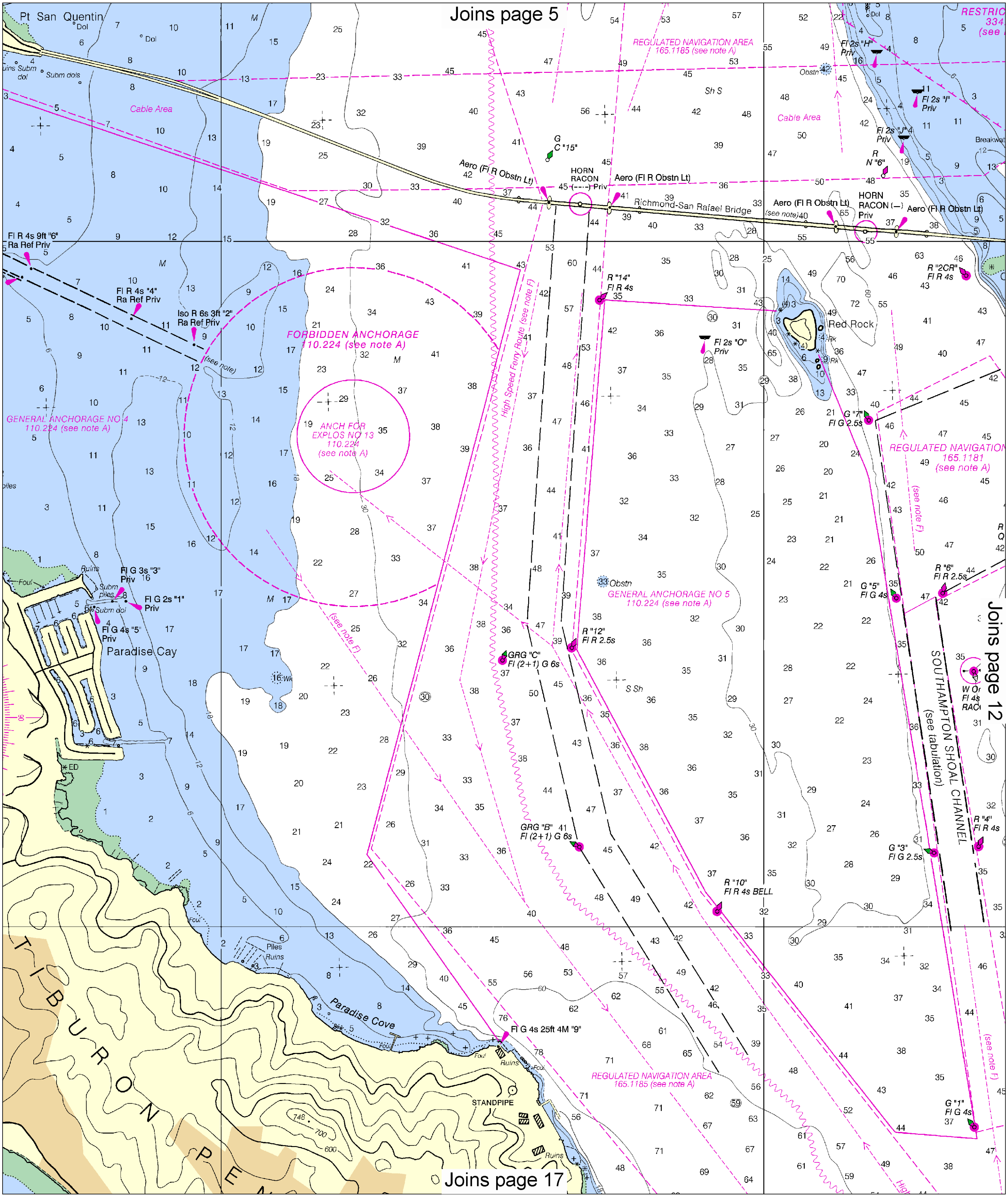
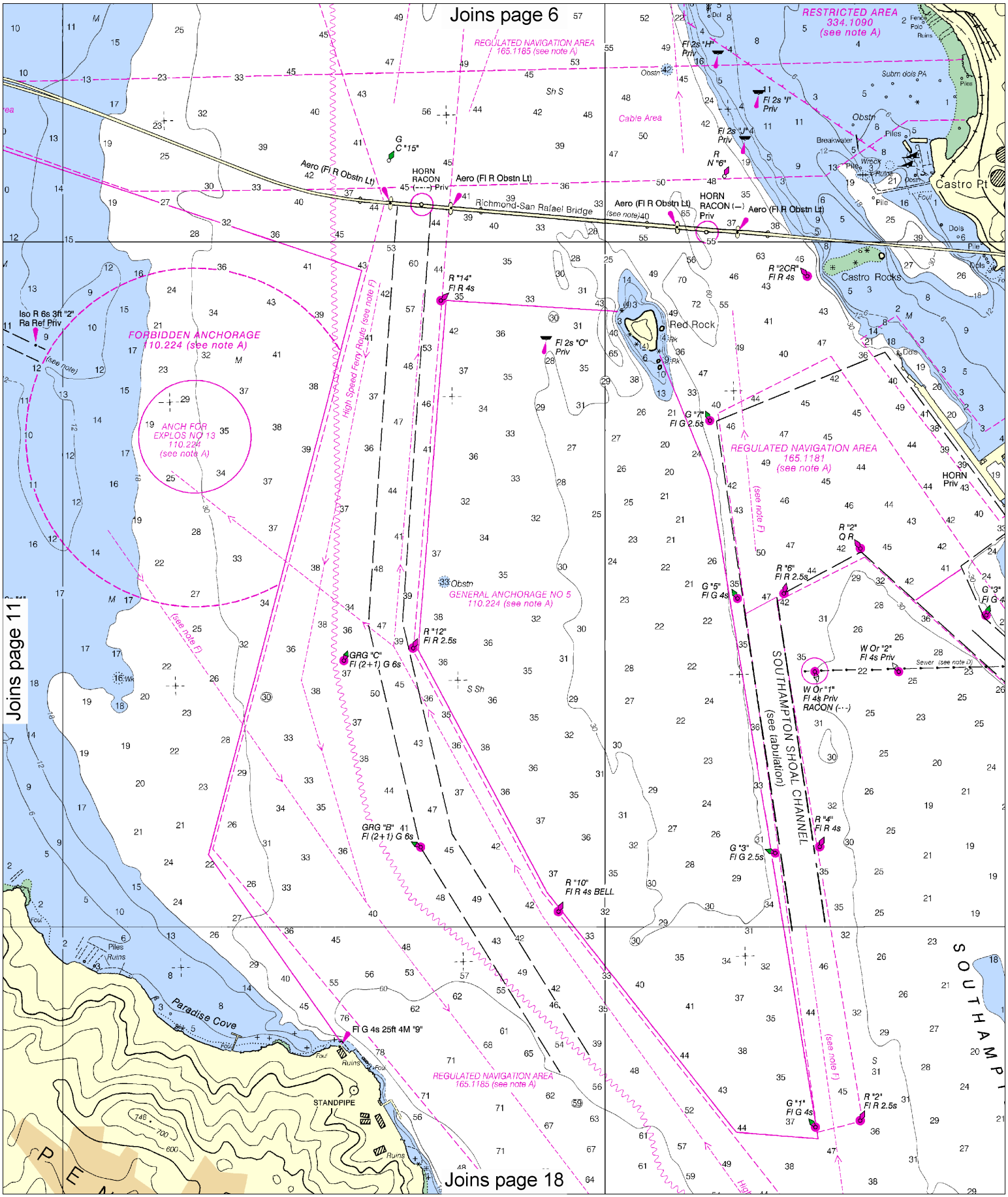
Nautical Miles: 0 — 1 — 1 ½

Yards: 500 — 0 — 500 — 1000 — 1500 — 2000 — 2500


Joins page 5
Pt San Quentin
Cable Area
REGULATED NAVIGATION AREA
165.1185 (see note A)
HORN
RACON
Aero (Fl R Obstn Lt)
Richmond-San Rafael Bridge
FORBIDDEN ANCHORAGE
110.224 (see note A)
ANCH FOR
EXPLOS NO 13
110.224
(see note A)
GENERAL ANCHORAGE NO 4
110.224 (see note A)
GENERAL ANCHORAGE NO 5
110.224 (see note A)
High Speed Ferry Route (see note F)
Red Rock
REGULATED NAVIGATION
165.1181
(see note A)
SOUTHAMPTON SHOAL CHANNEL
(see tabulation)
Joins page 12
Paradise Cay
Paradise Cove
STANDPIPE
TIBURON PEN
Fl G 4s 25ft 4M "9"
R "10"
Fl R 4s BELL
GRG "B"
Fl (2+1) G 6s
GRG "C"
Fl (2+1) G 6s
R "12"
Fl R 2.5s
R "14"
Fl R 4s
Joins page 17



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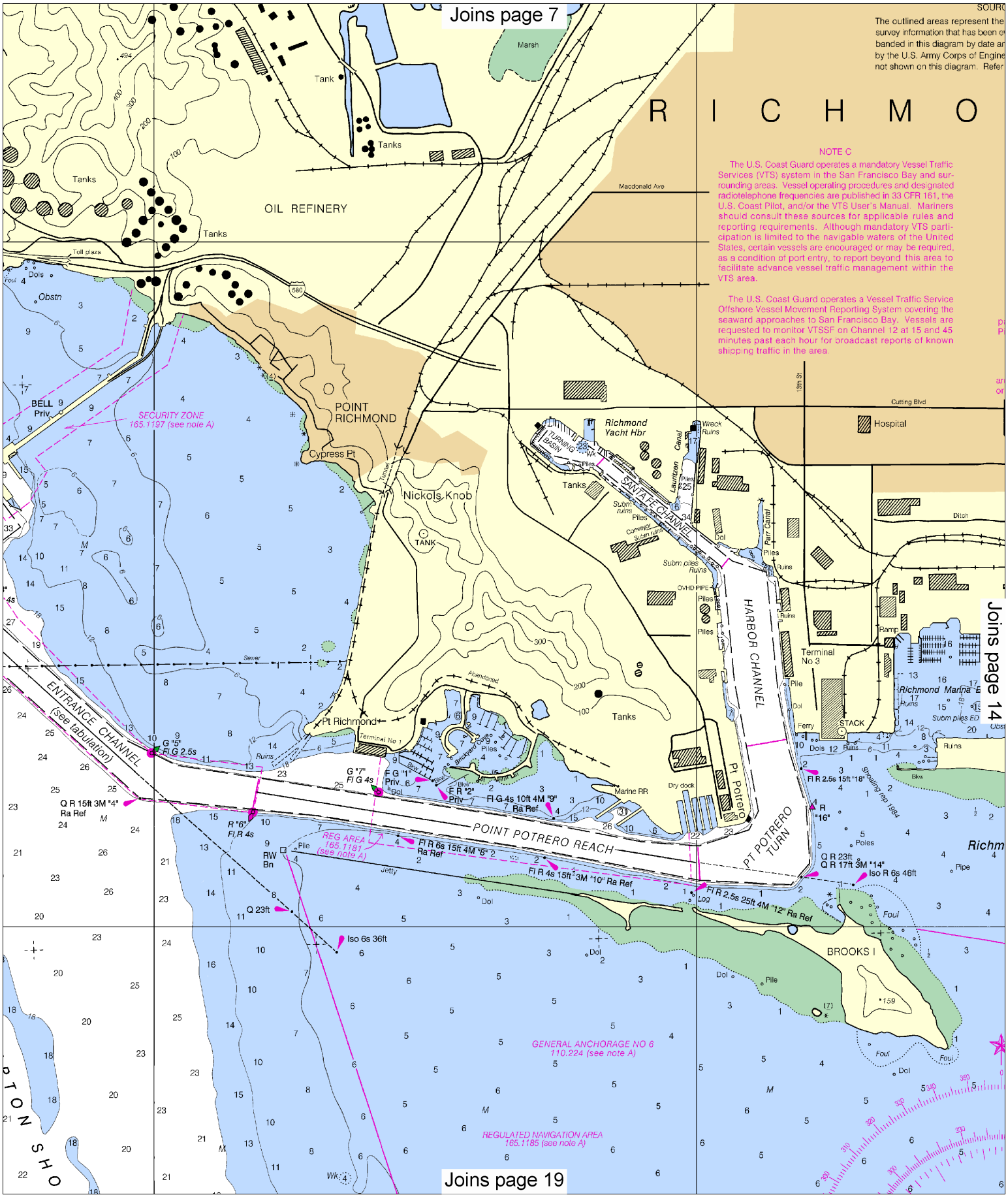
Nautical Miles

0 1 1½

Yards

500 0 500 1000 1500 2000 2500


Joins page 7
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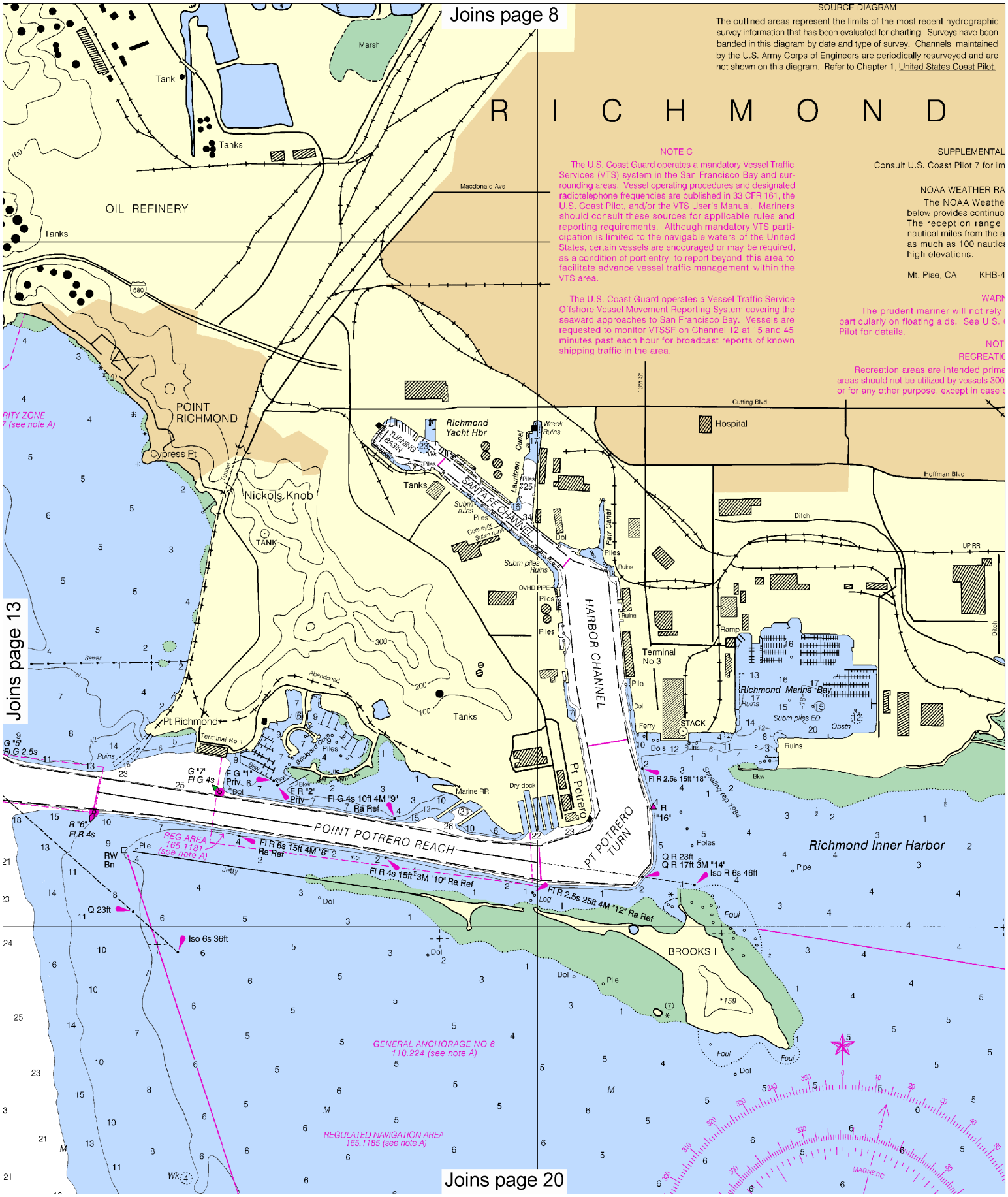
OIL REFINERY
Tanks
Marsh
Tank
Macdonald Ave
Toll plaza
Cutting Blvd
Hospital
POINT RICHMOND
Cypress Pt
Nickols Knob
SECURITY ZONE 165.1197 (see note A)
Richmond Yacht Hbr
TURNING BASIN
SANTA FE CHANNEL
Wreck
Ruins
Parr Canal
HARBOR CHANNEL
Terminal No 3
Richmond Marina
Pt Richmond
Terminal No 1
ENTRANCE CHANNEL (see tabulation)
POINT POTRERO REACH
PT POTRERO TURN
Pt Potrero
Marine RR
Dry dock
STACK
Ferry
BROOKS I
REG AREA 165.1181 (see note A)
GENERAL ANCHORAGE NO 6 110.224 (see note A)
REGULATED NAVIGATION AREA 165.1185 (see note A)
Joins page 14
Joins page 19



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Yards
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Joins page 9

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Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard, and National Geospatial-Intelligence Agency.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

For Symbols and Abbreviations see Chart No. 1

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:

⊙(Accurate location) o(Approximate location)

NOTE D

The City of Richmond is requesting vessels to use extreme caution when turning or anchoring in the vicinity of their 72" diameter sewer pipeline which is located 9300 feet offshore of Point Richmond at a depth of 26 feet below mean lower low water in approximate position 37° 54' 47" N, 122° 25' 06" W.

NOTE E

PRECAUTIONARY AREA

Traffic within the Precautionary Area consists of vessels maneuvering on various courses. Vessels transiting the Precautionary Area should, when possible, keep the centerline of the area to port providing for a counterclockwise movement of vessels within the area. Mariners are advised to use extreme caution when navigating within this area.

TIDAL INFORMATION

PLACE		Height referred to datum of soundings (MLLW)		
NAME	(LAT/LONG)	Mean Higher High Water	Mean High Water	Mean Low Water
		feet	feet	feet
Sausalito	(37°51'N/122°29'W)	5.7	5.1	1.1
Berkeley	(37°52'N/122°18'W)	5.9	5.3	1.1
Angel Island (west side)	(37°52'N/122°27'W)	5.6	5.0	1.1
Angel Island, East Garrison	(37°52'N/122°25'W)	5.9	5.3	1.2
Point Chauncey	(37°54'N/122°27'W)	5.7	5.1	1.1
Richmond Inner Harbor	(37°55'N/122°21'W)	6.0	5.4	1.1
Point San Quentin	(37°57'N/122°29'W)	5.8	5.2	1.1

Dashes (- - -) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from http://tidesandcurrents.noaa.gov.

(Sep 2012)

HORIZONTAL DATUM

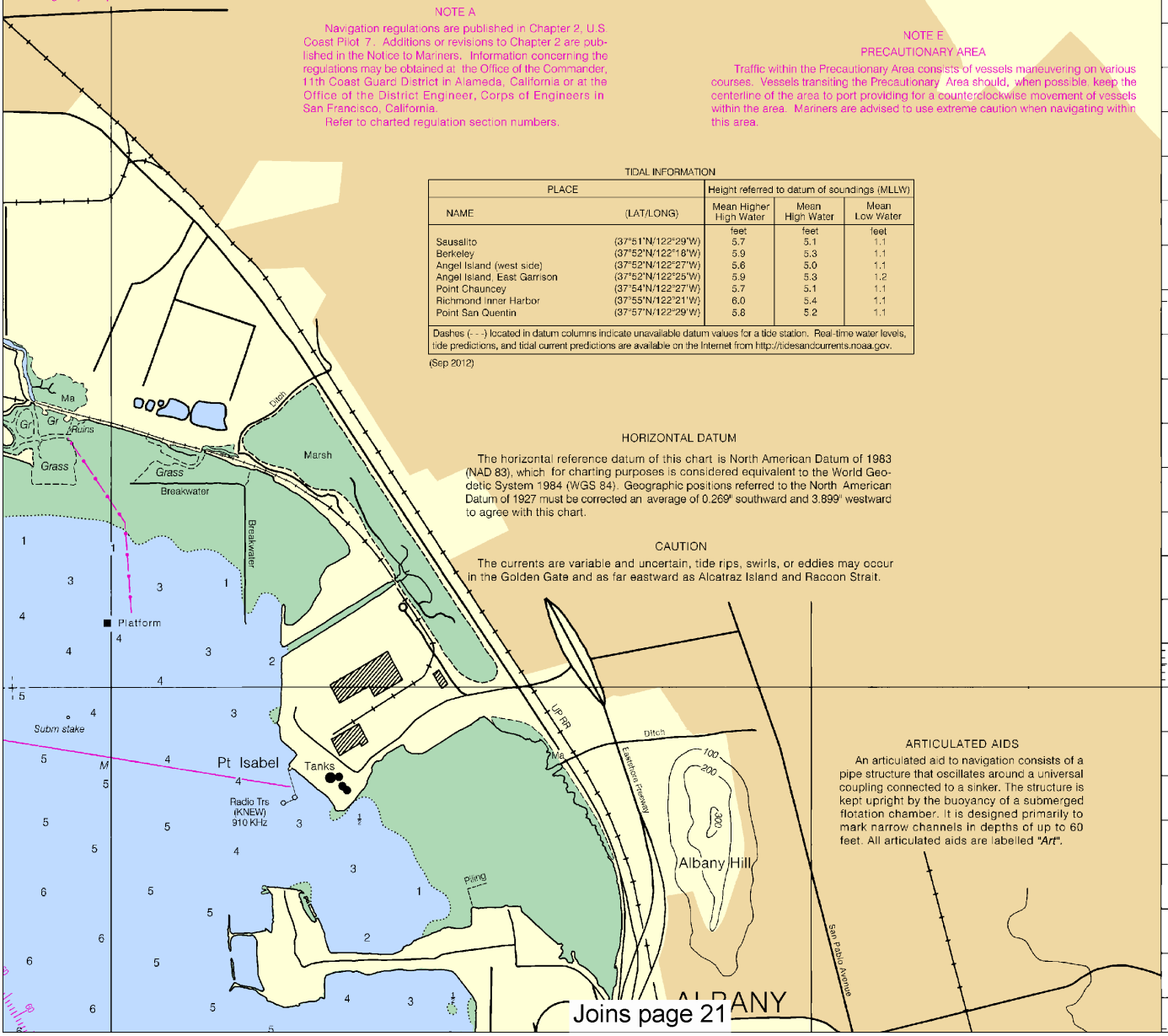
The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.269" southward and 3.899" westward to agree with this chart.

CAUTION

The currents are variable and uncertain, tide rips, swirls, or eddies may occur in the Golden Gate and as far eastward as Alcatraz Island and Racoon Strait.

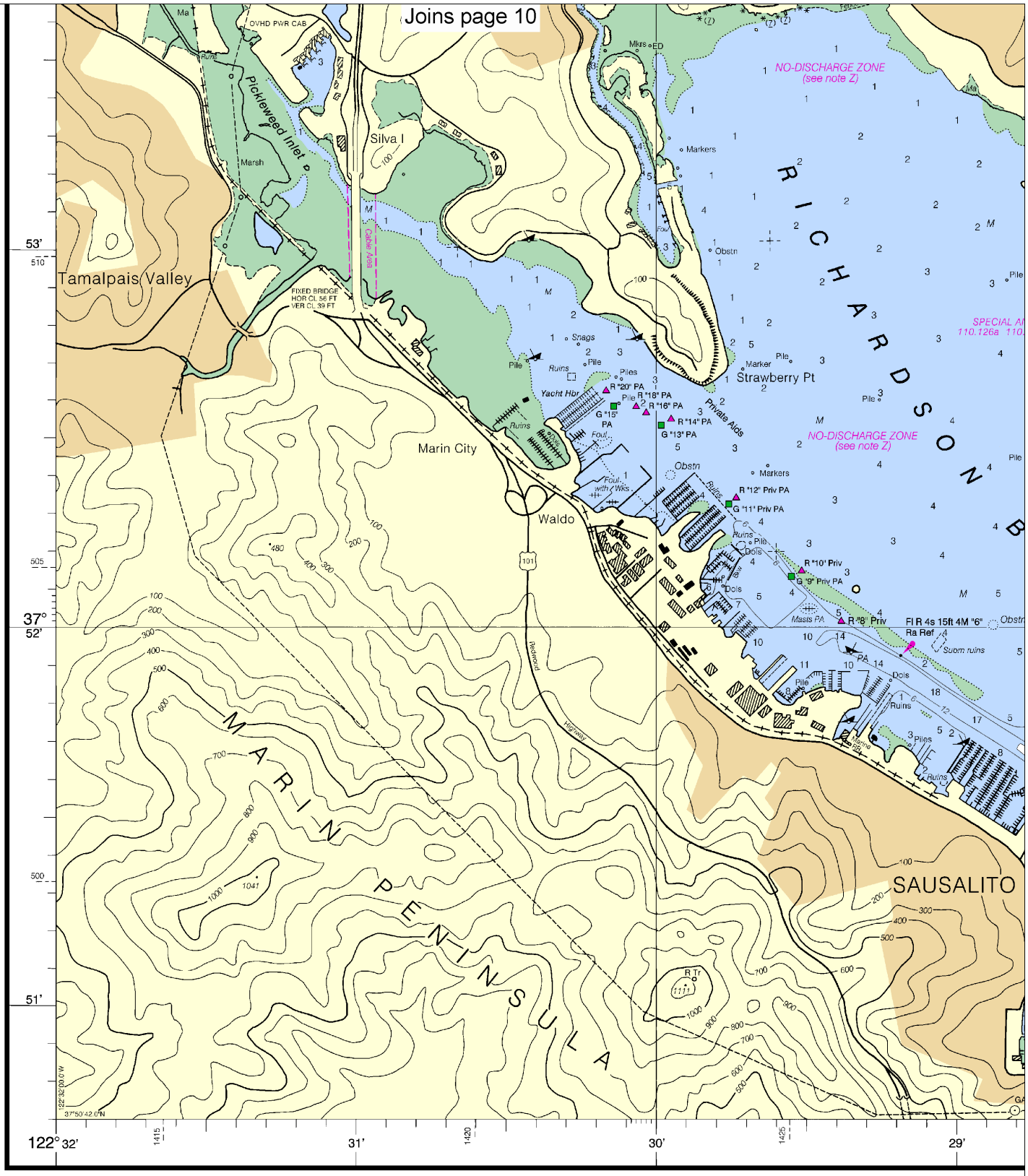
ARTICULATED AIDS

An articulated aid to navigation consists of a pipe structure that oscillates around a universal coupling connected to a sinker. The structure is kept upright by the buoyancy of a submerged flotation chamber. It is designed primarily to mark narrow channels in depths of up to 60 feet. All articulated aids are labelled "*Art*".



Joins page 21

530
56'
525
55'
520
515
54'
510



12th Ed., Oct./ 12 ■ Corrected through NM Nov. 17/12
Corrected through LNM Nov. 06/12

18653

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

PRINT-ON-DEMA

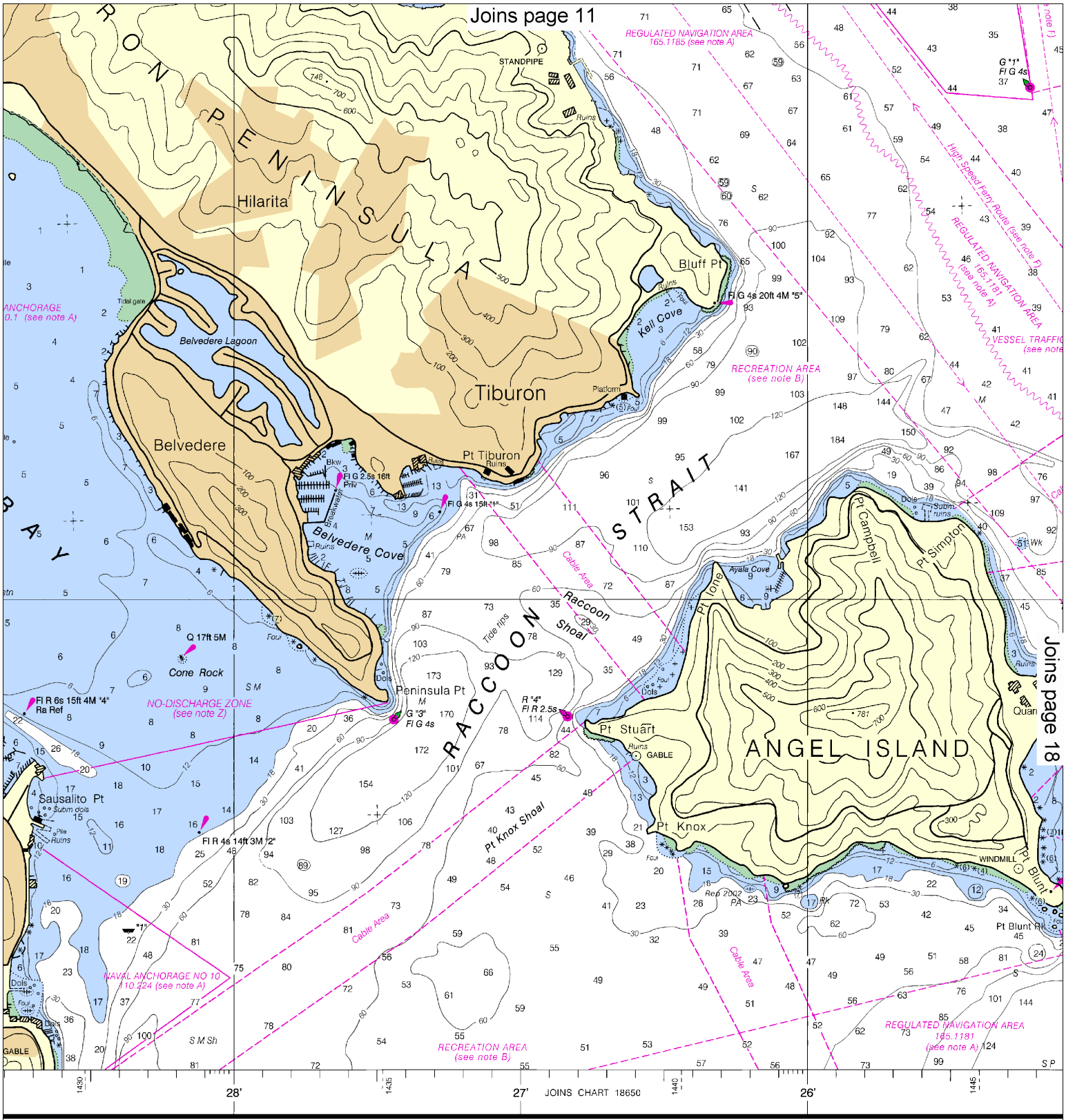
NOAA and its partner, OceanGrafix, offer this chart and critical corrections. Charts are printed when ord Editions are available 2-8 weeks before their release d about Print-on-Demand charts or contact NOAA at h OceanGrafix at 1-877-56CHART or http://www.ocean

Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:20,000~~ See Note on page 5.

Nautical Miles: 0 — 1 — 1 ½

Yards: 500 — 0 — 500 — 1000 — 1500 — 2000 — 2500



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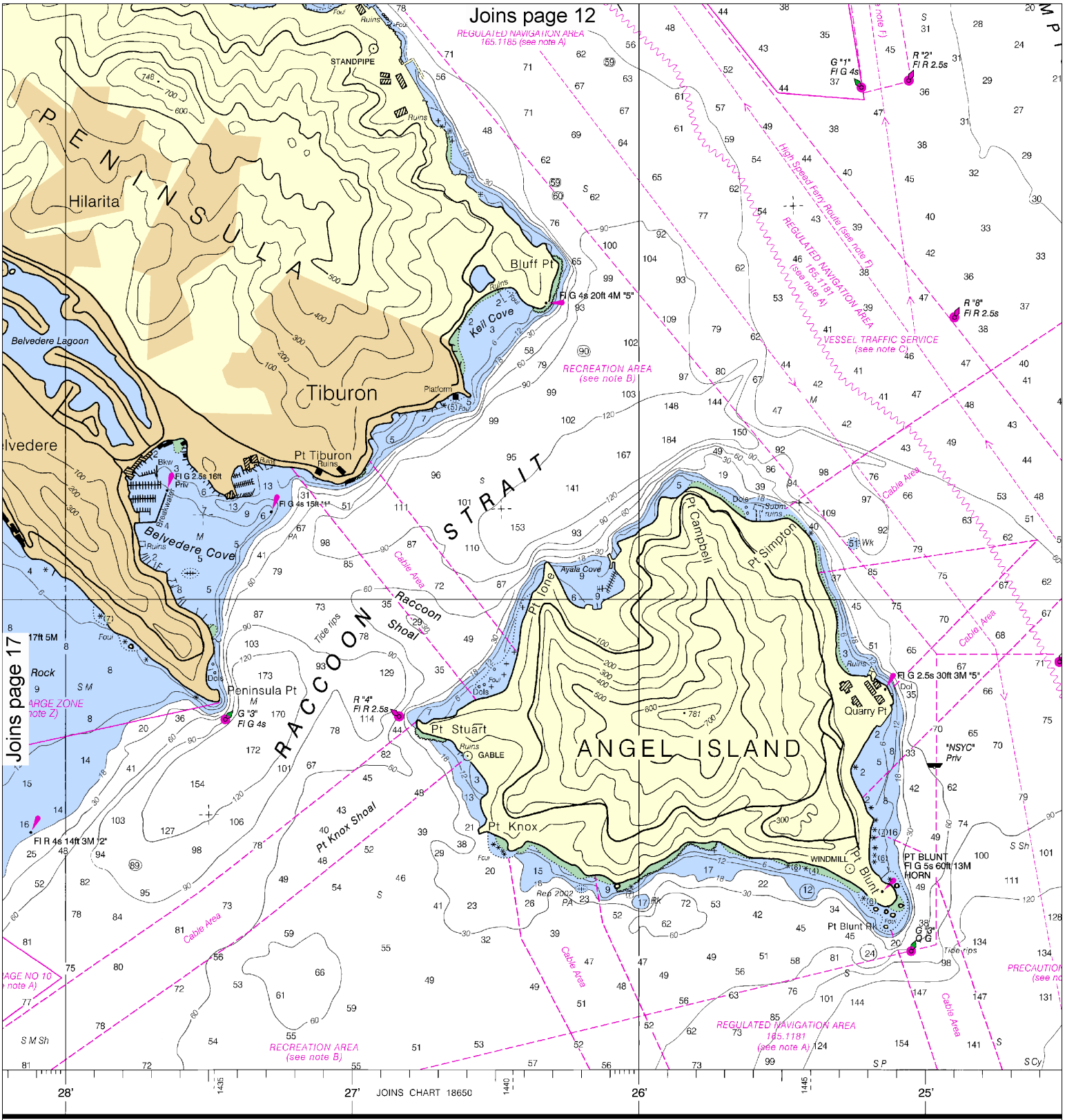
SOUNDINGS IN FEET



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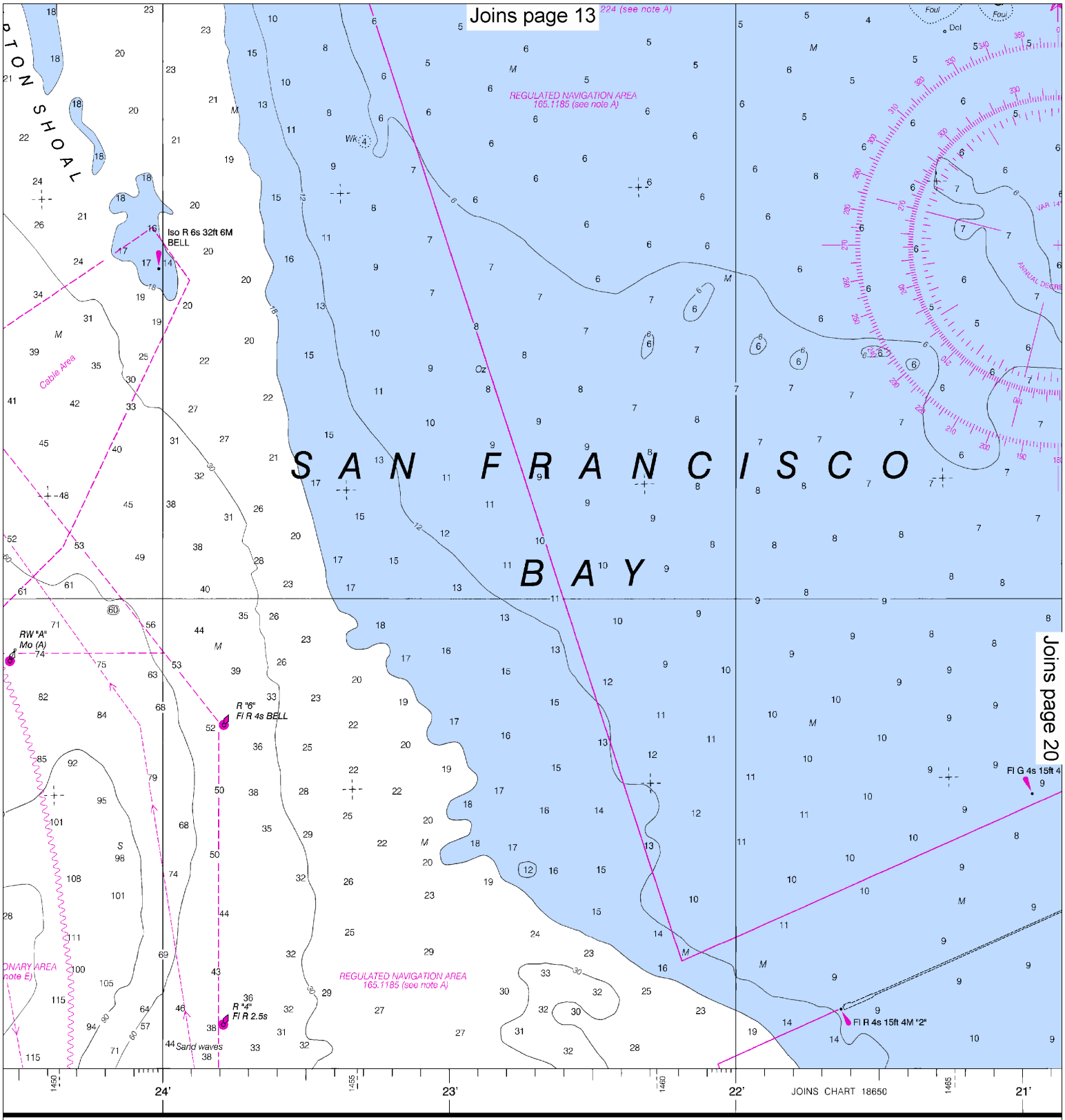
Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:20,000~~ See Note on page 5.

Nautical Miles: 0 — 1 — 1 ½

Yards: 500 — 0 — 500 — 1000 — 1500 — 2000 — 2500



t Washington, D.C.
ENT OF COMMERCE
ATMOSPHERIC ADMINISTRATION
OCEAN SERVICE
ST SURVEY

SCALE 1:20,000

Nautical Miles
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Statute Miles
¼ 0 ½ 1 1¼

Yards
500 0 500 1000 1500 2000 2500

Meters
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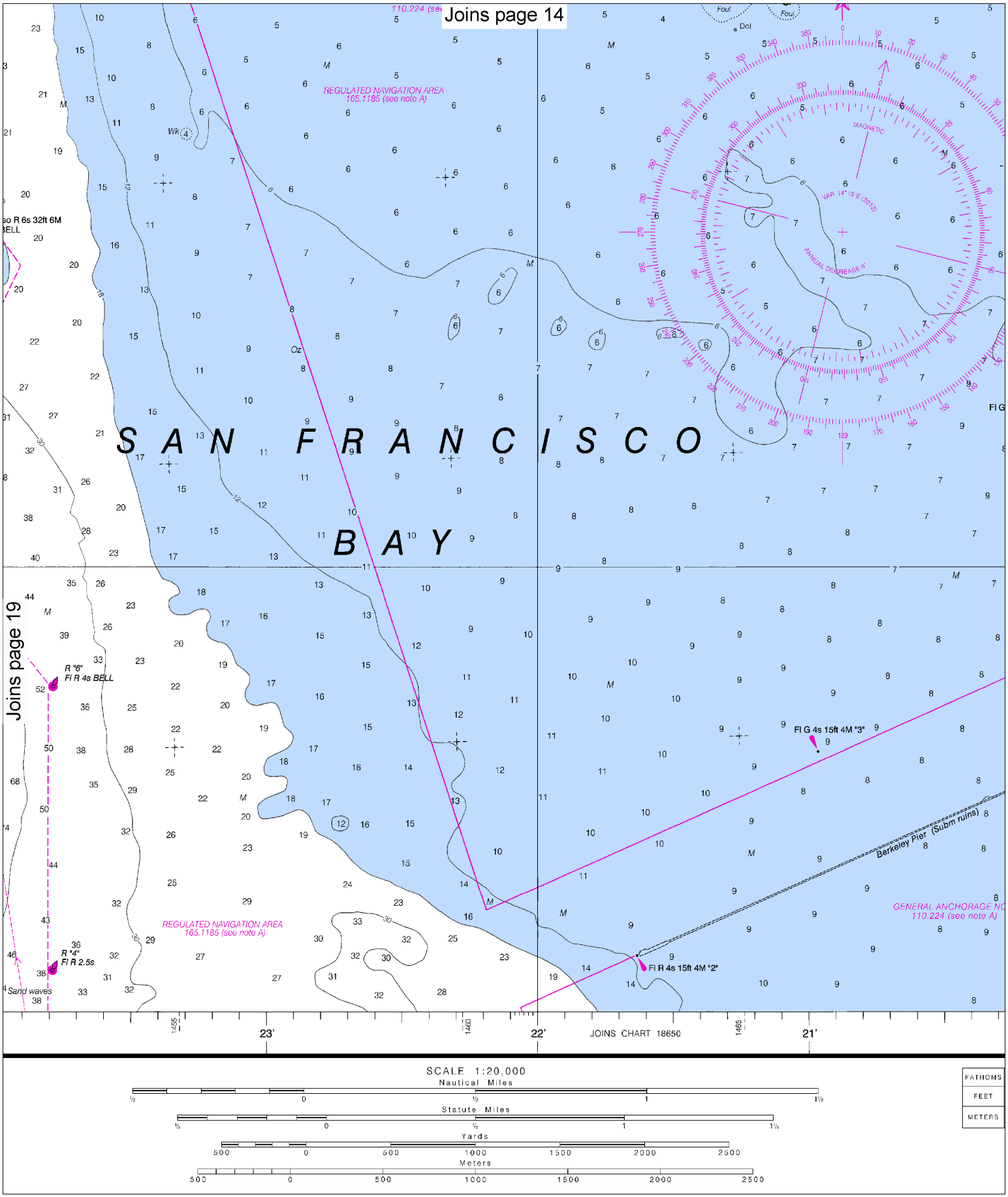


Note: Chart grid lines are aligned with true north.

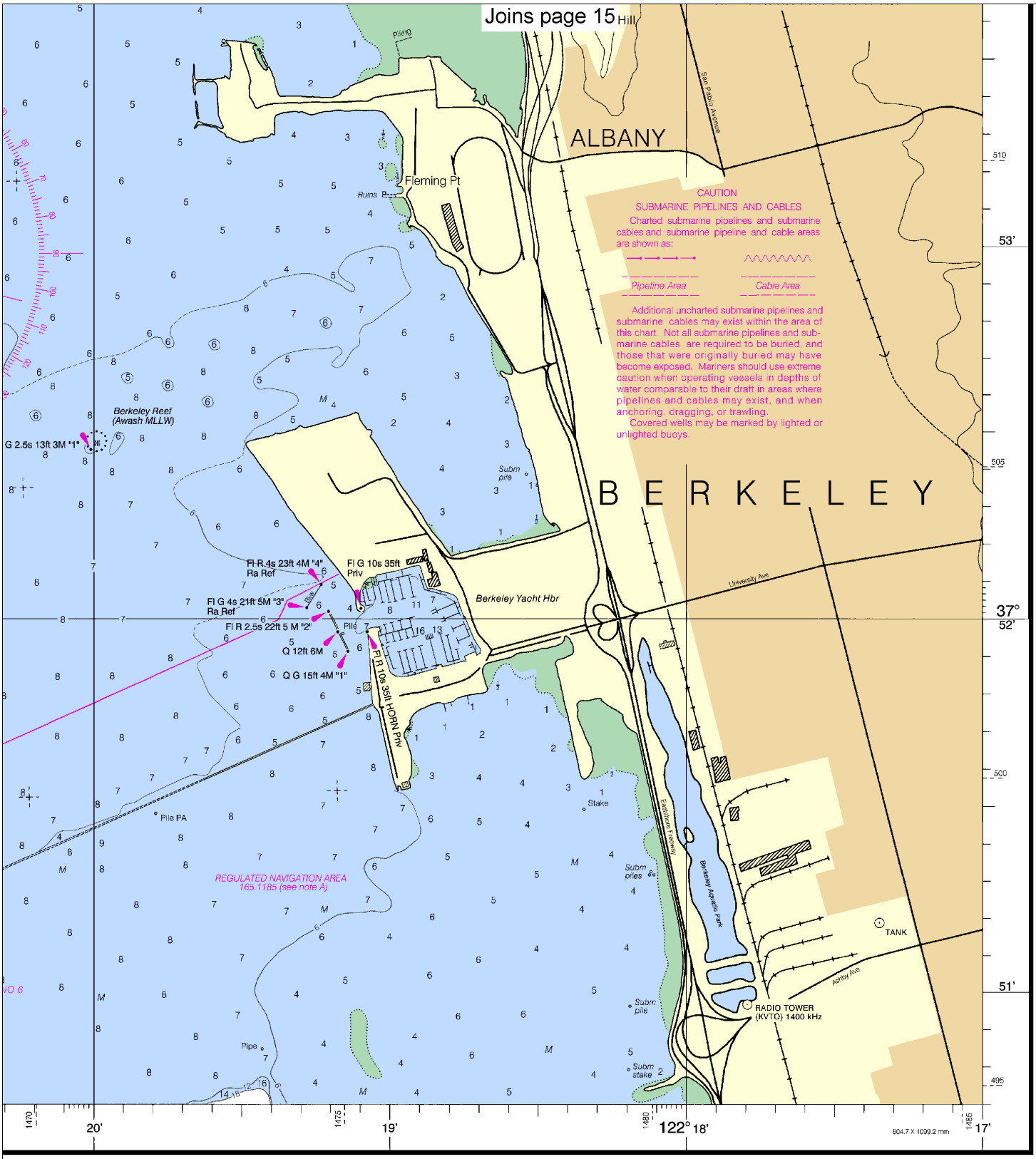
Printed at reduced scale. ~~SCALE 1:20,000~~ See Note on page 5.

Nautical Miles

0 1 1½

Yards

500 0 500 1000 1500 2000 2500



Angel Island to Pt San Pedro

SOUNDINGS IN FEET - SCALE 1:20,000

18653

ED NO. 12
NSN 7642014014992
NGA REFERENCE NO. 18AHA18653

EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.
Channel 9 – Communications between boats and ship-to-coast.
Channel 13 – Navigation purposes at bridges, locks, and harbors.
Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.
Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.
Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!

All Hazards NOAA Weather Radio NOAA's National Weather Service

NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.
http://www.nws.noaa.gov/nwr/

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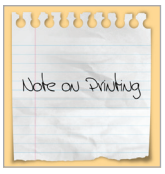

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